

REMARKS

Claims 1-9 and 11-18 are pending in this application. Claims 1-3 and 5-15 stand rejected and claim 4 is objected to. Applicants wish to thank the Examiner for the indication of allowable subject matter in claim 4. By this Amendment, claims 8, 9, and 13 have been amended. Claims 16-18 have been added, and claim 10 has been canceled without prejudice. The amendments made to claims 8, 9, and 13 do not alter the scope of these claims, nor have these amendments been made to define over the prior art. Rather, the amendments to the claims have been made for cosmetic reasons to improve the form thereof. In light of the amendments and remarks set forth below, Applicants respectfully submits that each of the pending claims is in immediate condition for allowance.

The claims are objected to because they include reference characters which are not enclosed within parentheses. Applicants respectfully request withdrawal of this objection. Applicants have not used reference designators in the claims. Applicants' previous amendment removed the reference designators from the claims as requested by the Examiner. As such, Applicants respectfully request that the Examiner withdraw this objection. If the objection to the claims is not withdrawn, Applicants request that the Examiner identify the reference designators in the claims.

Claims 9 and 13 are objected to for various informalities. Applicants have amended claims 9 and 13 in an effort to remove those objections. As such, Applicants respectfully request all of the objections to the claims be withdrawn.

Claim 8 stands rejected under 35 U.S.C. § 112, first paragraph.

Applicants have amended claim 8 in line with the Examiner's rejection. As such, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. § 112.

Claims 1-3, 5-7, and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,272,141 ("Reed"). Applicants respectfully request reconsideration and withdrawal of this rejection.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or combine references to arrive at the claimed subject matter. The prior art references must also teach or suggest all the limitations of the claim in question. See, M.P.E.P. § 706.02(j). A reference can only be used for what it clearly discloses or suggests. See, In re Hummer, 113 U.S.P.Q. 66 (C.C.P.A. 1957); In re Stencel, 4 U.S.P.Q.2d 1071, 1073 (Fed. Cir. 1987). Here, the references, whether taken individually or in combination, do not disclose or suggest the invention claimed by the Applicants.

The Office Action admits that Reed does not explicitly disclose the plurality of input ports, plurality of output ports, and control signals in each node. In Reed, the nodes each contain three input terminals and three output terminals. There are two input terminals for data and one control input terminal. Likewise, there are two output terminals for data and one control output terminal. However, this does not mean that every two nodes in the network disclosed in Reed are

connected by a series of control lines. Control lines are only present where indicated and there is no teaching to put control lines elsewhere.

In particular, there are no control lines between elements 324 and 332 as shown in Figure 3a of Reed. Thus, the Examiner's statement on page 4, lines 11-15 is incorrect. There is no control line or even series of control lines connecting elements 324 and 332 to communicate this control information. As such, Reed fails to disclose the limitations explicitly recited in Applicants' claim and one would not be motivated to modify Reed to yield the explicitly recited claims of the present case. Thus, Applicants respectfully request reconsideration and withdrawal of the rejection to claims 1-3, 5-7 and 9.

Claims 10-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Reed in view of U.S. Patent No. 5,940,389 ("Yang"). Applicants will address this rejection with respect to currently pending claims 11-18. Applicants respectfully request reconsideration and withdrawal of this rejection.

The Office Action acknowledges that Reed does not disclose a plurality of output ports that are accessible from the second input port but not from the first output port. The Office Action utilizes Figure 10 of Yang to support this limitation. However, one would not be motivated to combine Yang with Reed. The nodes in the present application are genuine switching nodes. In other words, the switching nodes of the present application have two output terminals and messages received through the same input terminals sometimes are sent out one of the output terminals and sometimes out of the other. In contrast, stage 0 of Yang is not a

switching node. In stage 0 of Yang's Figure 10, the input terminal determines the output terminal for all messages. Thus, stage 0 of Yang's Figure 10 is not even a node with multiple input and output terminals. Therefore, the combination of Reed and Yang fail to disclose Applicants' explicitly recited limitations. Thus, claims 11-18 are allowable over the cited references.

Further, in accordance with the pending claims, when two messages simultaneously arrive at a 2X2 node, the node is always set in the bar position. In other words, message MA from node A always goes to the output terminal to node D and message MB from node B always goes to the output terminal to node H. There is nothing like this in Yang. As shown in Fig. 10 of Yang, messages can simultaneously arrive at a node and be routed in some cases in the bar state as in the node in the upper left (the top node of stage zero) and in other cases in the cross state as in the upper right (the top node of stage four).

Applicants have responded to all of the rejections and objections recited in the Office Action. Reconsideration and a Notice of Allowance for all of the pending claims are therefore respectfully requested.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

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If the Examiner believes an interview would be of assistance, the Examiner is welcome to contact the undersigned at the number listed below.

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Respectfully submitted,

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